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EXAMINER

FUREMAN, JARED

ART UNIT	PAPER NUMBER
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2876

DATE MAILED: 06/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/493,756

Applicant(s)

CARMICHAEL ET AL.

Examiner

Jared J. Fureman

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/25/2002 has been entered. Claims 1-46 are pending.

### ***Claim Objections***

2. Claim 18 is objected to because of the following informalities: Claim 18, line 7: "said second memory" lacks proper antecedent basis, "second" should be deleted (note that claim 18 does not recite a first memory). Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iijima (US 5,615,381, previously cited) in view of Mohan (US 6,121,922, previously cited).

Iijima teaches a smart card (IC card 11) having the dimensions of a conventional plastic credit card, the smart card comprising a microprocessor (CPU 31) and a memory

Art Unit: 2876

(EPROM 33, RAM 37, EEPROM 35), wherein the microprocessor and the second memory are in electrical communication with each other (see figures 1-3, column 3 lines 1-6 and 13-34).

Iijima fails to teach the memory being configured for storing geographical position data, the smart card comprising an automated location tracking means, the automated location tracking means being in electrical communication with the microprocessor and the second memory, a global positioning system satellite in duplex communication with the location tracking means, a central processing center in duplex communication with the global positioning system satellite, the central processing center capable of receiving coordinate data transmitted from the global positioning system satellite and determining the location of the smart card, wherein the location tracking means is capable of receiving the coordinate data from the global positioning system satellite and transmitting the data to the memory means, wherein the memory means comprises a program for enabling the microprocessor to translate the coordinate data to a global position and to store the data in the memory.

Mohan teaches a system for locating the position of a card (module 100 within enclosure 310), the system comprising: a card comprising a microprocessor (controller/subsystem 300), the microprocessor being in electrical communication with a memory means (not shown), the memory means being configured for storing geographical position data (the GPS receiver may be activated as well as the telecom link and used to gather information relating to geographical positioning, which may then be stored and transmitted over the telecom link, see column 6 lines 1-7), and a location

Art Unit: 2876

tracking means (GPS receiver 360 and/or cellular data link and modem 320), a global positioning system satellite (GPS satellite network and cellular satellite network, since the cellular satellite network forms part of the location tracking system the cellular satellite network can also be considered a global positioning system satellite, since it is used in determining the location of the card) in duplex communication with the location tracking means, a central processing center (404) in duplex communication with the global positioning system satellite, the central processing center capable of receiving coordinate data transmitted from the global positioning system satellite (via the module's cellular data link and modem 320) and determining the location of the card, wherein the location tracking means is capable of receiving the coordinate data from the global positioning system satellite and transmitting the data to the memory means, wherein the memory means comprises a program for enabling the microprocessor to translate the coordinate data to a global position (as shown on the display format 350) and to store the data in the memory (see figures 1, 2, 4, 5, column 1 line 65 - column 2 line 43, column 2 line 66 - column 3 line 41, column 4 line 43 - column 5 line 20, and column 6 lines 16-56).

In view of Mohan's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the smart card as taught by Iijima, the memory being configured for storing geographical position data, the smart card comprising an automated location tracking means, the automated location tracking means being in electrical communication with the microprocessor and the memory, a global positioning system satellite in duplex communication with the location tracking

Art Unit: 2876

means, a central processing center in duplex communication with the global positioning system satellite, the central processing center capable of receiving coordinate data transmitted from the global positioning system satellite and determining the location of the smart card, wherein the location tracking means is capable of receiving the coordinate data from the global positioning system satellite and transmitting the data to the memory means, wherein the memory means comprises a program for enabling the microprocessor to translate the coordinate data to a global position and to store the data in the memory, in order to provide the ability to locate a user carrying the card.

5. Claims 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iijima as modified by Mohan as applied to claim 37 above, and further in view of Gildea et al (US 5,861,841, previously cited).

Iijima as modified by Mohan fails to teach the smart card comprising a program capable of processing coordinate data and generating a travel log based on the data, the program being in electrical communication with the microprocessor, memory, and location tracking means, the program being capable of enabling the microprocessor to generate a map based on the coordinate data received from the satellite, and a computer peripheral reader in communication with a computer, the computer peripheral reader being capable of reading the coordinate data stored in the memory and transmitting that data to the computer.

Gildea et al teaches a smart card (credit card size receptacle and GPS processing device 10) including location tracking means, the smart card comprising a program capable of processing coordinate data and generating a travel log based on

Art Unit: 2876

the data, the program being in electrical communication with a microprocessor (DSP system 14), memory, and location tracking means, the program being capable of enabling the microprocessor to generate a map based on the coordinate data received from the satellite, and a computer peripheral reader (to communicate with I/O 26) in communication with a computer (27), the computer peripheral reader being capable of reading the coordinate data stored in the memory and transmitting that data to the computer (see figures 1t, 1b, column 1 lines 11-28, column 2 line 56 - column 3 line 9, column 3 lines 30-37, column 3 line 63 - column 4 line 30, and column 5 line 60 - column 6 line 5).

In view of Gildea et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the system as taught by Iijima as modified by Mohan, the smart card comprising a program capable of processing coordinate data and generating a travel log based on the data, the program being in electrical communication with the microprocessor, memory, and location tracking means, the program being capable of enabling the microprocessor to generate a map based on the coordinate data received from the satellite, and a computer peripheral reader in communication with a computer, the computer peripheral reader being capable of reading the coordinate data stored in the memory and transmitting that data to the computer, in order to provide a recorded history of the user's travels for subsequent review.



Art Unit: 2876

6. Claims 1-6, 8, 13, 14, 35, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iijima in view of Grant (US 6,095,416, previously cited), Indeck et al (US 5,920,628), and Mohan.

Re claims 1-6, 8, 13, and 14: Iijima teaches a smart card (IC card 11) capable of performing more than one function (the card can operate as a smart card or can be used as a conventional magnetic strip card), the smart card having the dimensions of a conventional plastic credit card and comprising: a first memory (magnetic strip 15) comprising a first set of data, a microprocessor (CPU 31), the microprocessor being in electrical communication with a second memory (EPROM 33, RAM 37, EEPROM 35), the first memory is a magnetic strip, the second memory comprises an EEPROM, the second memory comprises RAM (37) and ROM (in that EPROM 33 is a ROM) (see figures 1-3, column 3 lines 1-6 and 13-34).

Iijima fails to teach the first memory comprising a second, third, and fourth set of data.

Grant teaches compressing bit spacing along a magnetic strip in order to store a plurality of sets of data on the magnetic strip, and that conventional magnetic card readers can read data stored with bit spacing at least 10 times smaller than the standard with high accuracy (see column 12 lines 14-21).

In view of Grant's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the card as taught by Iijima, the first memory comprising a second, third, and fourth set of data, in order to store a greater



Art Unit: 2876

amount of data on a magnetic card, thus providing a magnetic card with multiple account information.

Iijima as modified by Grant fails to teach the first set of data to access a bank account, the second set of data to access a credit card account, the third set of data representing the identification of the holder of the card, and the fourth set of data to access a telephone communication services.

Indeck et al teaches that at the time of the invention it was well known to those of ordinary skill in the art to use magnetic cards to access a bank account (ATM cards, debit cards), access a credit card account, store data representing the identification of the holder of the card (ID cards), and to access telephone communication services (telephone card) (see column 2 lines 3-8).

In view of Indeck et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the card as taught by Iijima as modified by Grant, the first set of data to access a bank account, the second set of data to access a credit card account, the third set of data representing the identification of the holder of the card, and the fourth set of data to access a telephone communication services, in order to provide the user with a smart card that can also be used for conventional magnetic card functions.

Iijima as modified by Grant and Indeck et al fails to teach the second memory being configured for storing geographical position data, an automated location tracking means for determining a location of the smart card, the location tracking means transmits an identification signal unique to the smart card, the signal being detectable

by a global positioning system satellite, wherein the location of the smart card is determined from the signal transmitted by the location tracking means.

Mohan teaches an automated location tracking means (system 500) for determining a location of a card sized device (module 100), a memory (not shown) configured for storing geographical position data (the GPS receiver may be activated as well as the telecom link and used to gather information relating to geographical positioning, which may then be stored and transmitted over the telecom link, see column 6 lines 1-7), the location tracking means transmits an identification signal (via the mobile link transmitter/receiver 540) unique to the card sized device, the signal being detectable by a global positioning system satellite (satellite or terrestrial network), wherein the location of the card is determined from the signal transmitted by the location tracking means (see figures 1, 2, 5, column 1 line 65 - column 2 line 43, column 2 line 66 - column 3 line 41, and column 4 line 43 - column 5 line 20).

In view of Mohan's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the card as taught by Iijima as modified by Grant and Indeck et al, the second memory being configured for storing geographical position data, an automated location tracking means for determining a location of the smart card, the location tracking means transmits an identification signal unique to the smart card, the signal being detectable by a global positioning system satellite, wherein the location of the smart card is determined from the signal transmitted by the location tracking means, in order to provide the ability to locate a user of the card.

Art Unit: 2876

Re claims 35 and 36: The teachings of Iijima as modified by Grant and Mohan have been discussed above. Iijima as modified by Grant and Mohan also teaches a necessarily present method of gaining access through an access device (a conventional magnetic card reader, such as a cash dispenser, pos terminal, etc.) upon payment of a value, the method comprising: inserting the smart card into the access device, wherein the access device is shaped to receive a smart card having the dimensions of a conventional plastic credit card, reading at least one of the four sets of data, performing a first authentication process (for example: a credit check and authorization) on the at least one set of data and permitting access (completing the transaction, thereby permitting access to goods/services) if the step of performing a first authentication process meets a required condition (see Iijima et al, figures 1-3, column 3 lines 1-7 and 13-34).

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iijima as modified by Grant, Indeck et al, and Mohan as applied to claim 1 above; and further in view of Smith (US 6,012,636).

Iijima as modified by Grant, Indeck et al, and Mohan fails to specifically teach the third set of data including birth date of the holder of the smart card.

Smith teaches the use of a card holder's birth date as a piece of identification data for the individual.

In view of Smith's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the system as taught by Iijima as modified by Grant, Indeck et al, and Mohan, teach the third set of data including birth

Art Unit: 2876

date of the holder of the smart card, in order to provide an additional item of identification data, thereby insuring a higher degree of accuracy in identifying individuals.

8. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iijima as modified by Grant, Indeck et al, and Mohan in view of the admitted prior art.

The teachings of Iijima as modified by Grant, Indeck et al, and Mohan have been discussed above.

Iijima as modified by Grant, Indeck et al, and Mohan fails to teach the second memory means comprising a fifth set of data representing a predetermined value, the fourth set of data represents a cash balance.

The admitted prior art teaches that one application for smart cards is an electronic purse or stored value card, wherein a prepaid amount of value or representation of currency is stored in the smart card memory for use in the place of cash, and that current applications for stored value cards include purchases at vending machines, telephones, gasoline pumps, etc. (see page 2 lines 8-20, of the specification).

In view of the admitted prior art, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the system and method as taught by Iijima as modified by Grant, Indeck et al, and Mohan, the second memory means comprising a fifth set of data representing a predetermined value and the fourth set of data represents a cash balance, in order to provide the ability to pay for

Art Unit: 2876

purchases at vending machines, telephones, gasoline pumps, etc., without the need to carry cash.

9. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iijima as modified by Grant, Indeck et al, and Mohan as applied to claim 1 above, and further in view of Pitroda (US 5,590,038, previously cited).

Iijima as modified by Grant, Indeck et al, and Mohan fails to teach the second memory means having stored therein a program for enabling the microprocessor to track a history of cash transactions made using the smart card and to generate a cash transaction history statement.

Pitroda teaches a smart card (universal electronic transaction card) comprising a microprocessor (microcontroller) with memory means (RAM and ROM), the memory means having stored therein a program for enabling the microprocessor to track a history of cash transactions made using the smart card and to generate a cash transaction history statement (see figure 3, column 11 lines 12-28 and column 12 lines 1-6).

In view of Pitroda's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the card as taught by Iijima as modified by Grant, Indeck et al, and Mohan, the second memory means having stored therein a program for enabling the microprocessor to track a history of cash transactions made using the smart card and to generate a cash transaction history statement, in order to eliminate or reduce the need for paper receipts (see Pitroda, column 12 lines 1-6).

10. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iijima as modified by Grant, Indeck et al, and Mohan, as applied to claim 1 above, and further in view of Gildea et al.

The teachings of Iijima as modified by Grant, Indeck et al, and Mohan have been discussed above.

Iijima as modified by Grant, Indeck et al, and Mohan fails to teach the second memory means has stored therein a program enabling the microprocessor to automatically convert a predetermined cash value from a first currency to a second currency based on a location of the smart card.

Gildea et al teaches a smart card (credit card size receptacle and GPS processing device 10) including means for determining a location of the card, and that smart cards may be provided with features such as determination of currency exchange at the present (see figures 1t, 1b, column 1 lines 11-28, column 2 line 56 - column 3 line 9, column 3 lines 30-37, column 3 line 63 - column 4 line 30).

In view of Gildea et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the card as taught by Iijima as modified by Grant, Indeck et al, and Mohan, the second memory means has stored therein a program enabling the microprocessor to automatically convert a predetermined cash value from a first currency to a second currency based on a location of the smart card, in order to adapt the card to be compatible for proper use in the current location/country.

Art Unit: 2876

11. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iijima as modified by Grant, Indeck et al, and Mohan as applied to claim 1 above, and further in view of Obradovich et al (US 6,133,853, previously cited).

Iijima as modified by Grant, Indeck et al, and Mohan fails to teach the location of the smart card is determined by a central processing center which is capable of identifying a location of a remote card reader and a location of a remote retail terminal.

Obradovich et al teaches a system including determining the location of a device (personal communicator device (PCD)) by a central processing center (card issuer or credit reporting facility) which is capable of identifying a location of a remote card reader and a location of a remote retail terminal (see figure 1, column 7 lines 14-23, and column 24 lines 50-63).

In view of Obradovich et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the system as taught by Iijima as modified by Grant, Indeck et al, and Mohan, the location of the smart card is determined by a central processing center which is capable of identifying a location of a remote card reader and a location of a remote retail terminal, in order to determine the location of the card to assist in determining the validity of credit requests.

12. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iijima as modified by Grant, Indeck et al, and Mohan as applied to claim 8 above, and further in view of Powers (US 5,521,362, previously cited).

Iijima as modified by Grant, Indeck et al, and Mohan fails to teach that a value representing cash can be transferred from the bank account to the second memory



Art Unit: 2876

means of the smart card, wherein a value representable as cash can be transferred from the credit card account to the second memory means of the smart card.

Powers teaches a system including a smart card (10), wherein a value representing cash can be transferred from a bank account to the memory means (18) of the smart card, wherein a value representable as cash can be transferred from a credit card account to the memory means of the smart card (see figures 1, 2, 7, column 1 lines 34-47, column 1 line 63 - column 2 line 10, column 2 line 48 - column 3 line 25).

In view of Powers' teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the system as taught by Iijima as modified by Grant, Indeck et al, and Mohan, that a value representing cash can be transferred from the bank account to the second memory means of the smart card, wherein a value representable as cash can be transferred from the credit card account to the second memory means of the smart card, in order to allow the smart card to store a value to be used in place of cash for purchases, and to allow the user to replenish the value when the value becomes depleted.

13. Claims 18-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iijima as modified by Grant and Mohan in view of Chapin, Jr. (US 5,883,377, previously cited).

The teachings of Iijima as modified by Grant and Mohan have been discussed above. Iijima as modified by Grant and Mohan also teaches the smart card having a proximal end, a distal end (see figure 1 of Iijima), a first magnetic strip (15), wherein the

Art Unit: 2876

first magnetic strip can only be read by a credit card reader when the smart card is inserted into the credit card reader from one of the proximal and distal ends.

Iijima as modified by Grant and Mohan fails to teach the smart card comprising a second magnetic strip comprising a third set of data, wherein the second magnetic strip can only be read by a credit card reader when the smart card is inserted into the credit card reader from the other of the proximal and distal ends.

Chapin, Jr. teaches a card (20) having a proximal end and a distal end, the card comprising a first magnetic strip (24) comprising a first set of data, and a second magnetic strip (26) comprising a third set of data, wherein the first magnetic strip can only be read by a credit card reader when the smart card is inserted into the credit card reader from one of the proximal and distal ends, wherein the second magnetic strip can only be read by a credit card reader when the smart card is inserted into the credit card reader from the other of the proximal and distal ends (see figures 1-3, column 2 line 59 - column 3 line 30, column 5 lines 15-25, column 5 line 56 - column 6 line 3).

In view of Chapin, Jr's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the card as taught by Iijima as modified by Grant and Mohan, a second magnetic strip comprising a third set of data, wherein the second magnetic strip can only be read by a credit card reader when the smart card is inserted into the credit card reader from the other of the proximal and distal ends, in order to provide an even greater magnetic storage capability, thereby increasing the versatility of the smart card and further reducing the number of cards required to be carried by the user.

Art Unit: 2876

14. Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iijima as modified by Grant et al, Mohan, and Chapin, Jr. as applied to claim 18 above, and further in view of the admitted prior art.

Iijima as modified by Grant et al, Mohan, and Chapin, Jr. fails to teach the memory means comprising a fifth set of data representing a cash balance, and tracking a history of cash transactions.

The teachings of the admitted prior art have been discussed above.

In view of the admitted prior art, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the card and method as taught by Iijima as modified by Grant et al, Mohan, and Chapin, Jr., the second memory means comprising a fifth set of data representing a predetermined value, the fourth set of data represents a cash balance, and tracking a history of cash transactions, in order to provide the ability to pay for purchases at vending machines, telephones, gasoline pumps, etc., without the need to carry cash, and to provide a history of the cash transactions for verification/record keeping purposes.

15. Claims 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iijima as modified by Grant et al, Mohan, and Chapin, Jr. as applied to claim 18 above, and further in view of Gildea et al.

Iijima as modified by Grant et al, Mohan, and Chapin, Jr. fails to teach wherein the memory has stored therein a program enabling the microprocessor to automatically convert a predetermined cash value from a first currency to a second currency based on a location of the smart card, the memory having stored therein a program for enabling

Art Unit: 2876

the microprocessor to process data received from a global satellite, to store the data in the memory, and to generate a travel log based on the data, the program further enables the microprocessor to generate a map of a plurality of locations based on the data received from the global satellite.

The teachings of Gildea et al have been discussed above. Gildea et al also teaches the smart card device storing data received from a global satellite, to generate a travel log based on the data, and to generate a map of a plurality of locations based on the data received from the global satellite (see figures 1t, 1b, column 1 lines 11-28, column 2 line 56 - column 3 line 9, column 3 lines 30-37, column 3 line 63 - column 4 line 30).

In view of Gildea et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the card as taught by Iijima as modified by Grant et al, Mohan, and Chapin, Jr., the memory has stored therein a program enabling the microprocessor to automatically convert a predetermined cash value from a first currency to a second currency based on a location of the smart card, the memory having stored therein a program for enabling the microprocessor to process data received from a global satellite, to store the data in the memory, and to generate a travel log based on the data, the program further enables the microprocessor to generate a map of a plurality of locations based on the data received from the global satellite, in order to adapt the card to be compatible for proper use in the current location/country, and to provide a recorded history of the user's travels for subsequent review.

Art Unit: 2876

16. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iijima as modified by Grant et al, Mohan, Chapin, Jr., and Gildea et al as applied to claim 28 above, and further in view of Obradovich et al.

Iijima as modified by Grant et al, Mohan, Chapin, Jr., and Gildea et al fails to teach the location of the smart card is determined by a central processing center which is capable of identifying a location of a remote card reader and a location of a remote retail terminal.

The teachings of Obradovich et al have been discussed above.

In view of Obradovich et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the card as taught by Iijima as modified by Grant et al, Mohan, Chapin, Jr., and Gildea et al, the location of the smart card is determined by a central processing center which is capable of identifying a location of a remote card reader and a location of a remote retail terminal, in order to determine the location of the card to assist in determining the validity of credit requests.

17. Claims 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iijima as modified by Grant et al, Mohan, Chapin, Jr., and the admitted prior art as applied to claim 26 above, and further in view of Powers.

Iijima as modified by Grant et al, Mohan, Chapin, Jr., and the admitted prior art fails to teach that a value representing cash can be transferred from the bank account to the second memory means of the smart card, wherein a value representable as cash

Art Unit: 2876

can be transferred from the credit card account to the second memory means of the smart card.

Powers teaches a system including a smart card (10), wherein a value representing cash can be transferred from a bank account to the memory means (18) of the smart card, wherein a value representable as cash can be transferred from a credit card account to the memory means of the smart card (see figures 1, 2, 7, column 1 lines 34-47, column 1 line 63 - column 2 line 10, column 2 line 48 - column 3 line 25).

In view of Powers' teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the card as taught by Iijima as modified by Grant et al, Mohan, Chapin, Jr., and the admitted prior art, that a value representing cash can be transferred from the bank account to the second memory means of the smart card, wherein a value representable as cash can be transferred from the credit card account to the second memory means of the smart card, in order to allow the smart card to store a value to be used in place of cash for purchases, and to allow the user to replenish the value when the value becomes depleted.

18. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iijima as modified by Mohan in view of Gildea et al.

The teachings of Iijima as modified by Mohan have been discussed above.

Iijima as modified by Mohan fails to teach the microprocessor comprising a program capable of converting a predetermined cash value from a first currency value to a second currency value based on the location of the smart card as determined by the automated location tracking means, wherein the program is in electrical

Art Unit: 2876

communication with the memory and the location tracking means, a central processing center comprising a computer having real time data comprising the value of the first currency in relation to the second currency and communication means between the smart card and the central processing center.

Gildea et al teaches a smart card (credit card size receptacle and GPS processing device 10) including means for determining a location of the card, and that smart cards may be provided with features such as determination of currency exchange at the present, thus, necessarily including a central processing center comprising a computer having real time data comprising the value of the first currency in relation to the second currency and communication means between the smart card and the central processing center (see figures 1t, 1b, column 1 lines 11-28, column 2 line 56 - column 3 line 9, column 3 lines 30-37, column 3 line 63 - column 4 line 30)

In view of Gildea et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the card as taught by Iijima and Mohan, the microprocessor comprising a program capable of converting a predetermined cash value from a first currency value to a second currency value based on the location of the smart card as determined by the automated location tracking means, wherein the program is in electrical communication with the memory and the location tracking means, a central processing center comprising a computer having real time data comprising the value of the first currency in relation to the second currency and communication means between the smart card and the central processing center, in order to adapt the card to be compatible for proper use in the current location/country.



Art Unit: 2876

19. Claims 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iijima as modified by Mohan and Gildea et al as applied to claim 40 above, and further in view of Nemirofsky et al (US 5,880,769).

The teachings of Iijima as modified by Mohan and Gildea et al have been discussed above.

Iijima as modified by Mohan and Gildea et al fails to specifically teach the communication means comprising a telephone line, the communication means comprising a satellite link, and the communication means comprising a wireless communications system.

Nemirofsky et al teaches the use of a communications means, which may be a telephone line (20) or a satellite link/wireless communications system (not shown), between a smart card (10) and a central processing center (service provider 16) (see figures 1, 2, column 2 line 66 - column 3 line 11).

In view of Nemirofsky et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the card as taught by Iijima as modified by Mohan and Gildea et al, the communication means comprising a telephone line, the communication means comprising a satellite link/wireless communications system, in order to provide efficient long range communications.

### ***Response to Arguments***

20. Applicant's arguments filed 3/25/2002 have been fully considered but they are not persuasive.

Art Unit: 2876

In response to applicant's argument that Mohan is limited by the size of the required components, applicant's maintain it is physically impossible to fit all the required components into a card that is 1/40<sup>th</sup> of an inch thick (see page 6 of the amendment filed on 3/25/2002), while the invention of Mohan is required to contain certain components, Mohan certainly does not limit the invention to components having a specific size/shape (for example a specific brand/model of GPS receiver having a specific size/shape). Mohan states, "Depending upon electrical and physical requirements and demands, such a completed module may be on the order of two inches square, more or less, with a thickness of one-half inch, more or less." (see column 3, lines 38-41) Mohan also teaches that the module may be disguised in some other form, such as a wristwatch, pendant, etc. (see column 4 lines 10-17). Thus, Mohan teaches that the size and shape of the module depends upon the intended use of the module. Certainly the example of two inches square and a thickness of one-half inch is only one example, the invention of Mohan is not limited to this size. Mohan also teaches that electronic miniaturization techniques may be used, including full-scale integration of entire subsystems, for example, in the form of very large-scale integrated circuits (see column 4 lines 23-27). Furthermore, applicants have no teaching of inventing any of the specific components used in their smart card, thus, it appears as though applicants have chosen components from the prior art (for example, the microprocessor and associated memory on smart chip 75, the GSM chip or signal transmitter). From the teachings of Mohan, it is clear to one of ordinary skill in the art at the time of the invention that any known component(s) capable of performing the

Art Unit: 2876

required operations can be used in the system as taught by Mohan. Regarding changes in size/shape, In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device.

Furthermore, Iijima teaches a smart card (11) having the dimensions of a conventional plastic credit card (the card includes a magnetic stripe 15, and may be used in a conventional magnetic card reader, see figure 1 and column 3 lines 1-7). When combining the teachings of Mohan with the teachings of Iijima, one of ordinary skill in the art would include the system of Mohan with the conventional card size of Iijima, since this is now the environment in which the system of Mohan is intended to be used. Further, Mohan teaches that the system is a tracking system using a highly miniaturized position determination and communications module which may be readily concealed, including on the person of an individual to be located (see column 1 lines 5-10). Thus the motivation for combining Mohan with Iijima is to provide a concealed tracking device, which may be used for locating an individual.

In response to applicant's argument that there is certainly no disclosure, motivation, or suggestion in Mohan to include a memory configured to store geographical position data (see page 7 of the amendment filed on 3/25/2002), Mohan states, "... the GPS receiver may be activated as well as the telecom link and used to

Art Unit: 2876

gather information relating to geographical positioning, which may then be stored and transmitted over the telecom link and then back from the monitoring facility, and subsequently compared to the originally stored value." (see column 6 lines 1-7) From this teaching, it is unambiguous that Mohan includes a memory configured for storing geographical position data.

In response to applicant's argument that there is no suggestion to combine the references (see pages 7-8 of the amendment filed on 3/25/2002), the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Mohan teaches that the system is a tracking system using a highly miniaturized position determination and communications module which may be readily concealed, including on the person of an individual to be located (see column 1 lines 5-10). Thus the motivation for combining Mohan with Iijima is to provide a concealed tracking device, which may be used for locating an individual.

In response to applicant's argument that neither inventor recognized the problem of lost or stolen credit cards, a problem appreciated and solved by the applicants, hence there was no motivation to combine the references (see page 8 of the amendment filed on 3/25/2002), The reason or motivation to modify the reference may often suggest what the inventor has done, but for a different purpose or to solve a different problem. It

Art Unit: 2876

is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by applicant. In re Linter, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972) (discussed below); In re Dillon, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1990), cert. denied, 500 U.S. 904 (1991) (discussed below). Although Ex parte Levengood, 28 USPQ2d 1300, 1302 (Bd. Pat. App. & Inter. 1993) states that obviousness cannot be established by combining references "without also providing evidence of the motivating force which would impel one skilled in the art to do what the patent applicant has done" (emphasis added), reading the quotation in context it is clear that while there must be motivation to make the claimed invention, there is no requirement that the prior art provide the same reason as the applicant to make the claimed invention.

In response to applicant's argument that the present invention requires the microprocessor to access several of the different data units within the different memory portions at the same time, which is not possible via the teachings of Iijima (see page 10 of the amendment filed on 3/25/2002), applicant's do not teach, much less claim, that it is necessary to access different electronic memories at the same time. Since Iijima enables the entire particular memory (see column 3 lines 35-42), clearly Iijima is capable of accessing different portions of the enabled memory at the same time in order to run a program.

In response to applicant's argument that Iijima requires not only an additional supervisory means, but also because of the way the IC card is set up to function, it requires an additional (third) memory not required by the present invention (see page 10

Art Unit: 2876

of the amendment filed on 3/25/2002), it is noted that applicant's use the transitional phrase "comprising". The transitional phrase "comprising" is open-ended and thus does not preclude the use of additional components or method steps (see MPEP 2111.03).

In response to applicant's argument that Grant can not be used to render the present invention obvious (see pages 10-11 of the amendment filed on 3/25/2002), Grant is merely being relied upon to teach that it is possible to compress the data on a magnetic strip, in order to store a plurality of data on a single magnetic strip. The specific card and card structure as taught by Grant is not being combined with the teachings of Iijima.

In response to applicant's traversal of the use of Official Notice (see page 11 of the amendment filed on 3/25/2002), please note that Indeck et al, Smith, and Nemirofsky et al have been applied in place of the use of Official Notice.

For the above reasons, the examiner feels that a prima facie case of obviousness has been established.

### ***Conclusion***

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sweatte teaches a pass smartcard which is a small, flat, card like a credit card that can contain electronics and wireless communication capabilities, including GPS (see column 2 lines 27-41).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jared J. Fureman whose telephone number is (703)

Art Unit: 2876

305-0424. The examiner can normally be reached on 7:00 am - 4:30 PM M-T, and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (703) 305-3503. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

*Jared J. Fureman*  
Jared J. Fureman  
June 15, 2002